Docket No.: ORQIS.018A

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INFORMATION DISCLOSURE STATEMENT

Steven F. Boll ing et al.

App. No.

10/735,413

Filed

: December 12, 2003

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Examiner

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Group Art Unit

3763

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing **186** references. Copies of disclosed U.S. patents and/or publications are not included pursuant to PTO waiver of the requirement under 37 C.F.R. § 1.98(a)(2)(i) for applications filed after June 30, 2003. Copies of other references, if listed, are enclosed.

This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: May 24, 2004

Andrew M. Douglas

Registration No. 51,212

Attorney of Record

Customer No. 20,995

(949) 760-0404

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. ORQIS.018A

APPLICATION NO. 10/735,413

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

APPLICANTS Steven F. Bolling , M.D., et al.

(USE SEVERAL SHEETS IF NECESSARY)

FILING DATE GROUP
December 12, 2003 3763

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	1.	2003/0144628	7/03/03	Sirimanne			
	2.	2003/0083617	5/01/03	St. Germain et al.			
	3.	2003/0069468	4/10/03	Bolling			
	4.	2002/0188167	12/12/02	Viole et al.			
	5.	2002/0188166	12/12/02	Viole et al.			
	6.	2002/0169413	11/14/02	Keren et al.			
	7.	2002/0111577	8/15/02	Sirimanne et al.			
	1	6,685,621	2/03/04	Bolling et al.			
	2	6,610,004	8/26/03	Viole et al.			-
	3	6,592,567	7/15/03	Levin et al.			
	4	6,558,356	7/19/98	Barbut			
	5	6,488,662	12/03/02	Sirimanne			
	6	6,428,464	8/06/02	Bolling			
	7	6,390,969	5/21/02	Bolling et al.			
	8	6,387,037	5/14/02	Bolling et al.			
-	9	6,299,575	10/09/01	Bolling			
	10	6,287,608	9/11/01	Levin et al.			
	11	6,245,045 B1	6/2001	Stratienko			
	12	6,228,052 B1	5/2001	Okada et al.			
	13	6,224,540	5/01/01	Lederman et al.			
	14	6,221,103	4/24/01	Melvin .			
	15	6,200,260	3/13/01	Bolling			
	16	6,190,408	2/20/01	Melvin			
	17	6,183,411	2/06/01	Mortier et al.			
	18	6,135,981	10/24/00	Dyke			
	19	6,085,754	7/11/00	Alferness et al.			
	20	6,083,198	7/04/00	Afzal			

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)	
	21	6,059,760	5/9/00	Sandmore et al.				
	22	5,964,694	10/12/99	Siess et al.				
	23	5,961,486	10/05/99	Twardowski et al.				
	24	5,947,953	9/7/99	Ash et al.				
	25	5,941,813	8/24/99	Sievers et al.				
-	26	5,911,685	6/15/99	Siess et al.				
	27	5,868,703	2/09/99	Bertolero et al.				
	28	5,851,174	12/22/98	Jarvik et al.				
	29	5,824,070	10/20/98	Jarvik				
	30	5,807,311	9/15/98	Palestrant				
	31	5,795,326	8/18/98	Siman				
	32	5,785,686	7/1998	Runge Thomas M.				
	33	5,776,111	7/07/98	Tesio				
	34	5,749,855	5/12/98	Reitan				
	35	5,746,575	05/05/98	Westphal et al.				
	36	5,584,804	12/17/96	Klatz et al.				
	37	5,571,093	11/05/96	Cruz et al.				
	38	5,562,595	10/08/96	Neisz				
	39	5,556,390	9/17/96	Hicks				
-	40	5,554,136	9/10/96	Luther				
	41	5,542,937	8/06/96	Chee et al.			•	
	42	5,536,250	7/16/96	Klein et al.			, -	
	43	5,533,958	6/9/96	Wilk				
	44	5,522,800	6/04/96	Crocker				
	45	5,514,073	5/7/96	Miyata et al.				
	46	5,511,958	04/30/96	Chen et al.				
	47	5,505,710	4/1996	Dorsey, III				
-	48	5,503,615	04/30/96	Goldstein				

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE
	49	5,486,159	1/23/96	Mahurkar			
	50	5,472,417	12/05/95	Martin et al.			
	51	5,453,087	9/24/85	Sommercorn et al.			
	52	5.453.076	09/26/95	Kiyota et al.			
	53	5,437,601	8/1/95	Runge			
	54	5,433,731	7/18/95	Hoegnelid et al.			
	55	5,429,584	07/04/95	Chiu			
	56	5,413,549	5/9/95	Leschinsky			·
	57	5,403,291	4/04/95	Abrahamson			
	58	5,378,230	1/03/95	Mahurkar			
	59	5,376,113	12/27/97	Jansen et al.			-
	60	5,374,239	12/20/94	Mischenko		_	
	61	5,352,180	10/04/94	Candelon et al.			
	62	5,346,458	09/13/94	Affeld			
	63	5,332,403	07/26/94	Kolff			
	64	5,318,518	6/07/94	Plechinger et al.			
	65	5,300,113	04/05/94	Arpesella et al.			
	66	5,290,227	3/1/94	Pasque			
	67	5,273,518	12/28/93	Lee et al.			
	68	5,267,940	12/07/93	Moulder			
-	69	5,263,978	11/23/93	Kaufman et al.			
	70	5,211,659	5/18/93	Strimling et al.			· · · · · · · · · · · · · · · · · · ·
	71	5,176,619	1/05/93	Segalowitz			-
	72	5,171,207	12/15/92	Whalen			
	73	5,169,379	12/08/92	Freed et al.		:	
	74	5,169,378	12/08/92	Figuera			
	75	5,147,388	9/15/92	Yamazaki			

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FILING DATE **GROUP** December 12, 2003 3763

U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)	
	76	5,147,281	9/15/92	Thornton et al.				
	77	5,133,744	7/28/92	Ramos Martinez				
	78	5,131,905	7/21/92	Grooters		, , , -		
	79	5,129,878	7/14/92	Takano et al.			 -	
	80	5,129,883	7/14/92	Black				
	81	5,116,564	5/26/92	Jansen et al.				
	82	5,098,370	3/24/92	Rahat et al.				
	83	5,092,844	3/03/92	Schwartz et al.				
	84	5,089,017	2/18/92	Young et al.				
	85	5,087,247	2/11/92	Horn et al.				
	86	5,069,662	12/03/91	Bodden				
	87	5,059,167	10/19/91	Lundquist et al.				
	88	5,020,516	6/04/91	Biondi et al.				
	89	4,995,857	2/26/91	Arnold				
	90	4,995,856	2/26/91	Heindl et al.				
	91	4,994,078	2/19/91	Jarvik				
	92	4,976,270	12/11/90	Pari et al.				
	93	4,968,293	11/06/90	Nelson				
	94	4,957,504	9/18/90	Chardack				
	95	4,944,745	7/31/90	Sogand et al.				
	96	4,927,407	5/22/90	Dorman			-	
	97	4,908,012	3/13/90	Moise et al.				
	98	4,906,229	3/06/90	Wampler			<u>,</u>	
	99	4,902,273	2/20/90	Choy et al.				
	100	4,902,272	2/20/90	Milder et al.				
	101	4,895,150	1/23/90	Isaacson et al.				
	102	4,883,462	11/28/89	Williamson et al.				

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Steven F. Bolling , M.D., et al.

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)	
	103	4,872,874	10/10/89	Taherin				
	104	4,861,330	8/29/89	Voss				
	105	4,838,889	6/13/89	Kolff				
	106	4,822,357	4/18/89	Forster et al.				
	107	4,771,765	9/20/88	Choy et al.				
	108	4,759,760	7/26/88	Snapp Jr.				
	109	4,756,302	7/12/88	Portner et al.				
-	110	4,719,921	1/19/88	Chirife	1			
	111	4,697,574	10/6/87	Karcher et al.				
	112	4,692,141	9/08/87	Mahurkar				
	113	4,690,134	9/01/87	Snyders			·	
	114	4,688,998	8/25/87	Olsen et al.				
	115	4,685,446	8/11/87	Choy				
	116	4,666,443	5/19/87	Portner				
	117	4,625,712	12/02/86	Wampler				
	118	4,611,578	5/27/86	Helmes				
	119	4,573,997	3/04/86	Wisman et al.				
	120	4,569,332	2/11/86	Schiff et al.				
	121	4,552,522	11/12/85	Polaschegg et al.				
	122	4,546,759	10/15/85	Solar				
	123	4,540,402	9/10/85	Aigner				
	124	4,522,195	6/11/85	Schiff				
	125	4,459,977	7/17/84	Pizon et al.			- 	
	126	4,457,673	7/03/84	Conley et al.		<u> </u>		
	127	4,405,313	9/20/83	Sisley et al.				
-	128	4,407,271	10/04/83	Schiff				
	129	4,384,829	5/24/83	Conely et al.				

DATE CONSIDERED

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ORQIS.018A	APPLICATION NO. 10/735,413
INFORMATION	DISCLOSURE STATEMENT		
В	Y APPLICANT	APPLICANTS Steven F. Bolling , M.D., et at.	
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U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)	
	130	4,302,854	12/01/81	Runge				
	131	4,240,409	12/23/80	Robinson et al.				
	132	4,167,046	9/11/79	Portner et al.				
	133	4,154,227	5/15/79	Krause et al.				
	134	4,143,616	3/13/79	Bible				
	135	4,135,496	1/23/79	Chazov et al.				
	136	4,080,958	3/19/78	Bregman et al.				
	137	4,077,394	3/07/78	McCurdy				
	138	4,051,840	10/4/77	Kantrowitz et al.				
	139	4,047,849	9/13/77	Clay				
	140	4,034,742	7/12/77	Thoma				
	141	4,004,299	1/25/77	Runge		, .		
	142	3,964,479	6/22/76	Boag et al.				
•	143	3,939,820	2/24/76	Grayzel				
. "	144	3,885,251	5/27/75	Pedrosa				
	145	3,835,864	9/17/79	Rasor et al.				
	146	3,692,018	9/19/72	Goetz et al.				
	147	3,592,184	7/13/71	Watkins et al.		·	***	
	148	3,017,885	1/19/62	Robicsek				
	149	2,935,068	5/30/60	Donaldson				
	150	2,876,769	3/10/59	Cordova				

	FOREIGN PATENT DOCUMENTS							
1 1 1		DOCUMENT NUMBER	DATE	COUNTRY CLASS		SUBCLASS	TRANSLATION	
INITIAL							YES	NO
	151	2 174 151A	1/10/85	UK			-	
	152	SU 1,303,165 A2 /	1/19/85	Russia				

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. ORQIS.018A

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Steven F. Bolling , M.D., et al.

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December 12, 2003

	FOREIGN PATENT DOCUMENTS							
EXAMINER DOCUMENT NUMBER C			DATE	DATE COUNTRY	CLASS	SUBCLASS	TRANSLATION	
INITIAL							YES	NO
	153	0,232,074	1/22/87	Europe				
	154	0 711 574 A1	5/15/96	EPO				
	155	0 533 432 A1 ,	3/24/93	EPO				
	156	0 411 605 A1 ,	1/08/90	EPO .				
	157	0 405 749 A1	5/25/90	EPO				
	158	WO 94/05347 /	3/17/94	wo				
-	159	WO 97/15228	5/01/97	wo				
	160	WO 98/14225 //	3/10/97	РСТ				
	161	WO 99/19010 /	4/22/99	РСТ				
	162	WO 99/42156 ·	8/26/99	РСТ				
	163	WO 99/59652	11/25/99	РСТ				
	164	WO 00/61207	10/19/00	РСТ				

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)						
	165 PCT International Search Report, App. Date: 6/18/03 PCT/US/03/04401						
	166	JAMA, January 8, 1968. Vol. 203. No 2, Initial Clinical Experience with Intra-aortic Balloon Pumping in Cardiogenic Shock. PP 113-118					
	167	Article: A Mechanical Auxiliar Ventricle. PP M340-344.					
	168	Article: Effect of Stationary Guiding Vanes on Improvement of the Washout Behind the Rotor in Centrifugal Blood Pumps: PP M220-224					
	169	Article: An Implantable Seal-less Centrifugal Pump: Comparison of Ultrasonic Transit Time and Ultrasonic Doppler Systems: PP 808-815					
	170	Article: Valluvan Jeavanandam. MD. Et al. TCI Heartmate Left Ventricular Assist System: Results with Bridge to Transplant and Chronic Support: 5PP total					
	171	Article: O.H. Frazier, MD. Long-Term Ventricular Support with the Heartmate in Patients Undergoing Bridge-to-Transplant Operation: 3PP total					
	172	Article: Concepts in the Application of Pneumatic Ventricular Assist Devices for Ischemic Myocardial Injury. PP 162-168					
	173	Article: Long-Term Left Ventricular Assist Device Use Before Transplantation: PP M530-M534					
	174	Article: In Vitro Characterization of a Magnetically Suspended Continuous Flow Ventricular Assist Device: PP M359-M360					
	175	Article: Estimation of Left Ventricular Function in Patients With a Left Ventricular Assist device: M544-551					
	176	Article: Long Term Follow Up of Survivors of Postcardiotomy Circulatory Support. Ruzevich et al.; 4535, A.S.A.I.O. Transactions 34 (1988) April-June, No. 2, Hagerstown, MD, USA. PP 16-124					

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FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ORQIS.018A	APPLICATION NO. 10/735,413
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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)					
	177 Article: Mechanical Cardiopulmonary Support During Arteriography and Surgical Correction of Coronary Insuff Myocardial Infarction with Cardiogenic Shock; Carlson et al. Journal of the Association for the Advancement of Instrumentation. Vol. 6, No. 3. May-June 1972; PP 244-248.					
	178	Article: The Sternotomy Hemopump, A Second Generation Intraarterial Assist Device. PP M218-220, 223.				
	179	Article: Transarterial Closed-Chest Left Ventricular (TaCLV) Bypass. PP 386-390.				
	180	Article: First Clinical Application of transarterial Closed-Chest Left Ventricular (TaCLV) Bypass. PP 386-391.				
	181	Article: Implantable Left Ventricular Assist Device. PP 1522-1533.				
	182	Article: Effects of Partial and Complete Unloading of The Failing Left Ventricle by Transarterial Left Heart Bypass. PP 865-872.				
	183	Article: Hydrodynamic Properties of a New Percutaneous Intra-aortic Axial Flow Pump. Reitan et al. ASAIO Journal 2000. pp. 323-328.				
	184	Journal of the Association for the Advancement of Medical Instrumentation, Vol. 10, No. 5, SeptOct 1976, p. 215; Medical Instrumentation Editorial				
	185	Dormandy, Goetz, and Kripke; Surgery, Feb. 1969, Vol. 65, No. 2, pp. 311-320; Hemodynamics and coronary blood flow with counterpulsation				
	186	The New England Journal of Medicine, Article: Treatment of Severe Fluid Overload by Ultrafiltration, Vol. 291, No. 15, Oct. 10, 1974, pp. 747-751				

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